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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,777	09/29/2003	Volkert A. Zeijlemaker	P-10499.00	2479

27581 7590 05/19/2006

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EXAMINER	
RAMIREZ, JOHN FERNANDO	

ART UNIT	PAPER NUMBER
3737	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,777	ZEIJLEMAKER ET AL.	
	Examiner	Art Unit	
	John F. Ramirez	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/23/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4, 8-10, 14-16, 22, 23 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Foster et al. (US 6,925,328).

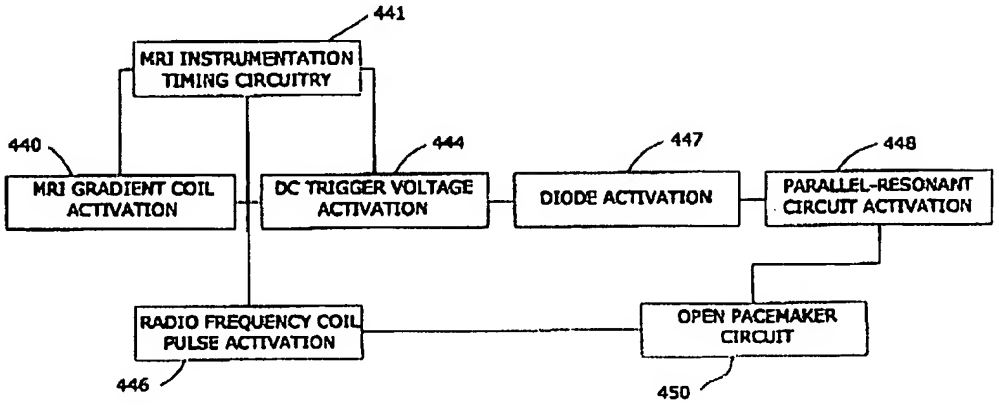

FIG.5

Foster et al. discloses a magnetic resonance imaging (MRI) device comprising: a magnet to generate a magnetic field (col. 1, lines 24-41); an electromagnetic radiation source to apply electromagnetic radiation bursts (col. 1, lines 24-41); an imaging unit to generate images of patient following application of radiation bursts (col. 8, lines 37-55); a receiver to receive information from an implantable medical device (IMD) (abstract); and a control unit to coordinate application of the electromagnetic radiation bursts based on the information (see Figure 5), the information defines a timing of stimulation pulses applied to a patient with the IMD, in which the received information defines a timing of the stimulation applied to the patient by the IMD (col. 7, lines 5- 67).

With respect to claims 8 and 9, Foster et al. shows in Figure 5 performing an MRI includes applying one or more electromagnetic radiation bursts and applying one or more gradient magnetic fields based on the information.

With respect to claims 14 and 15, Foster et al., teaches all the structures as set forth above. The method comprising the steps of: 1) sending information to an implantable medical device (IMD) to define operation of the IMD during MRI; 2) performing the MRI in coordination with operation of the IMD and 3) the information defines a timing for application of stimulation pulses by the IMD would be inherently met by the disclosure.

Claims 6, 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Terry et al. (US 6,937,906).

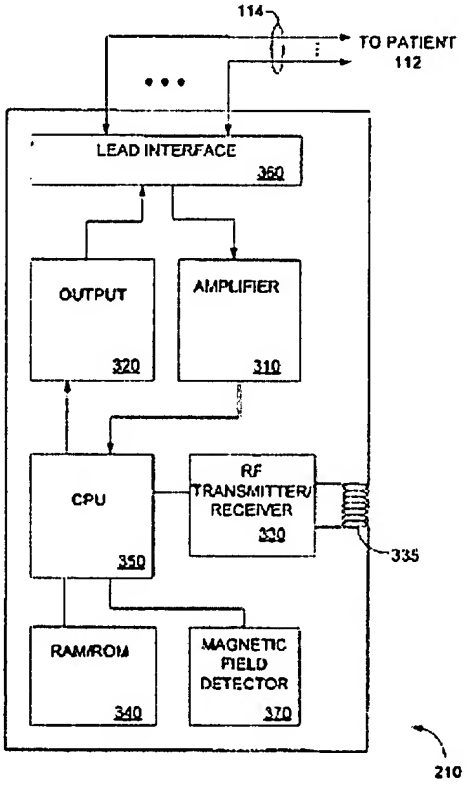

Figure 3

Terry et al. shows in Figures 1-3, an implantable medical device (IMD) (110) with a control unit (col. 3, line 48-50) to coordinate application of magnetic

resonance imaging (MRI) electromagnetic radiation bursts with operation of an implantable medical device (col. 3, line 48 – col. 4, line 44); and a transmitter (330) to transmit information to the IMD to cause the IMD to operate in coordination with an MRI device (col. 3, line 48 – col. 4, line 44), the medical device comprises a programmer for the IMD (Figure 3) and an MRI system, further comprising stimulating the patient with the IMD to induce an arrhythmia during the MRI (col. 5, line 21- col. 6, line 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 3, 7, 11-13, 17, 18, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al. in view of Greatbatch (US 2003/0109901).

Foster et al. teaches all the limitations of the claimed subject matter except for mentioning specifically an MRI system and a pacemaker which collects information of a cardiac cycle, and the received information includes an indication of sensed conditions measured by the IMD, an indication of one or

more stimulations applied by the IMD, and the MRI device applies the electromagnetic radiation bursts based on the information.

However, an MRI system and a pacemaker which collects information of a cardiac cycle, and the received information includes an indication of sensed conditions measured by the IMD, an indication of one or more stimulations applied by the IMD, and the MRI device applies the electromagnetic radiation bursts based on the information is considered conventional in the art by the teachings of Greatbatch (see Abstract and Figure 1).

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Foster et al., with the above discussed enhancements would have been considered obvious because such modifications would have provided a stand-alone cardiac stimulating and monitoring system during MRI scanning without operational disruption and without physiological injury to the patient's heart.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JFR
05/09/06

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